



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,128	11/27/2001	Alan N. Houghton	MSK.P-026-3	3698
52334	7590	07/18/2006	EXAMINER	
Marina Larson & Associates LLC			HARRIS, ALANA M	
re: MSK			ART UNIT	
P. O. BOX 4928			PAPER NUMBER	
DILLON, CO 80435-4928			1643	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,128

Applicant(s)

HOUGHTON ET AL.

Examiner

Alana M. Harris, Ph.D.

Art Unit

1643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-27, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) 25-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-23, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Claims 20-27, 29 and 30 are pending.

Claims 1-19 and 28 have been cancelled.

Claim 30 has been added.

Claims 25-27, drawn to non-elected inventions are withdrawn from examination.

Claims 20-24, 29 and 30 are examined on the merits to the extent that the xenogeneic differentiation antigen is a human tyrosinase and human gp75.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Withdrawn Objection

Claim Objections

3. The objection of claim 28 is no longer objected to because it has been cancelled.

Withdrawn Rejections

Claim Rejections - 35 USC § 112

4. The rejection of claims 20, 21, 23 and 29 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating canine melanoma comprising the step of administering to an immunologically-effective amount of a xenogeneic differentiation antigens, human tyrosinase and human gp75, does not

reasonably provide enablement for the broad treatment of melanoma in a mammalian subject comprising the step of administering the broad class of xenogeneic differentiation antigens is withdrawn. Claims 1-19 and 28 have been cancelled.

Claim Rejections - 35 USC § 102

5. The rejection of claims 1, 4, 10 and 11 under 35 U.S.C. 102(a) as being anticipated by Zhai et al. (The Journal of Immunology 156: 700-710, January 1996) is withdrawn in light of the cancellation of the claims.

Claim Rejections - 35 USC § 103

6. The rejection of claims 1-6, 10-13 and 28 under 35 U.S.C. 103(a) as being unpatentable over Zhai et al. (The Journal of Immunology 156: 700-710, January 1996), and further in view of U.S. Patent number 5,773,291 (filed January 23, 1995/ IDS reference, submitted May 23, 2003) is withdrawn in light of the cancellation of the claims.

Double Patenting

7. The provisional rejection of claims 20-24 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16-19 of copending Application No. 10/041,410 (filed January 7, 2002) is withdrawn in light of the amendment to copending application's claim 16. However, this rejection may be reinstated upon the deletion of the noted new matter, see the Final Rejection of

application '410 mailed May 3, 2006, Claim Rejection - 35 USC § 112, New Matter Rejection.

Claim Rejections - 35 USC § 103

8. Claims 20-23, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhai et al. (The Journal of Immunology 156: 700-710, January 1996), and further in view of U.S. Patent number 5,773,291 (filed January 23, 1995/ IDS reference, submitted May 23, 2003) and U.S. Patent number 6,080,727 (effective filing date March 26, 1996). Zhai teaches a method of inducing specific T cell immunity for mammalian melanoma treatment. Several xenogenic differentiation antigens, including human melanoma-associated antigen, gp100 were expressed in recombinant adenoviruses were administered to C57BL/6 mice and rendered a protective affect against murine melanoma, see Abstract; page 707, Figure 7 and first paragraph of Discussion section; and page 708, Table IV.

Zhai does not teach a method for treating melanoma in a mammalian subject comprising administration of a human tyrosinase xenogeneic differentiation antigen or a human gp75 of the same type as the differentiation antigen expressed by melanoma cells of the said subject. However, patent '291 teaches the expression of biologically active human tyrosinase and gp75, tumor-associated antigens (TAA) within a vector, see Abstract; and column 10, lines 41-48. And patent '727 teaches the administration of nucleotides in a method of arresting or inhibiting melanoma cancer cell proliferation in a mammal, such as a dog, see Abstract; and column 10, lines 37-49.

It would have been *prima facie* obvious at the time of the claimed invention was made to use tyrosinase or gp75 as a xenogeneic differentiation antigen to be administered in the melanoma treatment exemplified by Zhai. One of ordinary skill in the art would have been motivated to do so with a reasonable expectation of success because it is well known in the art that tyrosinase and gp75, quite like gp100 is recognized as a TAA implicated in the development of cancer vaccines and the Zhai treatment was advantageous, see Zhai, page 700, abstract and column 1. Moreover, one of ordinary skill in the art would have been motivated to substitute gp100 with human tyrosinase or human gp75 in order to establish another successful mode of melanoma treatment for any mammal listed in patent '727 (including a dog), column 10, lines 37-49 because it is well established that biologically active melanoma-associated antigens are capable of being expressed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alana M. Harris, Ph.D. whose telephone number is (571) 272-0831. The Examiner works a flexible schedule, however she can normally be reached between the hours of 7:30 am to 6:30 pm, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry R. Helms, Ph.D. can be reached on (571) 272-0832. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 1643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALANA M. HARRIS, PH.D.

PRIMARY EXAMINER


Alana M. Harris, Ph.D.

10 July 2006